BRISSUN TECHNOLOGIES PVT LTD



"Master the present shape the future"



ABOUT US

We at BRISSUN Technologies Pvt. Ltd., have an experience of more than Eighteen years in inventing vegetable oil processing solutions that work for the industry. Today, we have advanced into being a leader in process efficiency, quality of refined oil and energy conservation with the help of technology, focused approach in manufacturing and industry tie-ups. At BRISSUN, we have a unique concoction of extensive expertise in both Process and Equipment manufacturing which allows us to engineer an industry-specific system that focuses on energy efficiency and utility management for edible oil refining. Our teams are propelled by the finest engineers of the land; these highly trained professionals have saved millions in process costs for our clients by developing innovative solutions. Our business practice and processes have combined into a singular philosophy of being trusted partners who provide innovative solutions with a combination of specialized knowledge and latest techniques. We provide plants and solutions to achieve optimum efficiency. Our refining plants are designed with quality in mind and manufactured at our own Pune based factory.

Our manufacturing unit is ISO certified 900 I - 2015 and CRISIL rated and ZED rating in progress.





VISION

Our vision is deep rooted in our fidelity to build our company in synergy with three groups of partners which are the

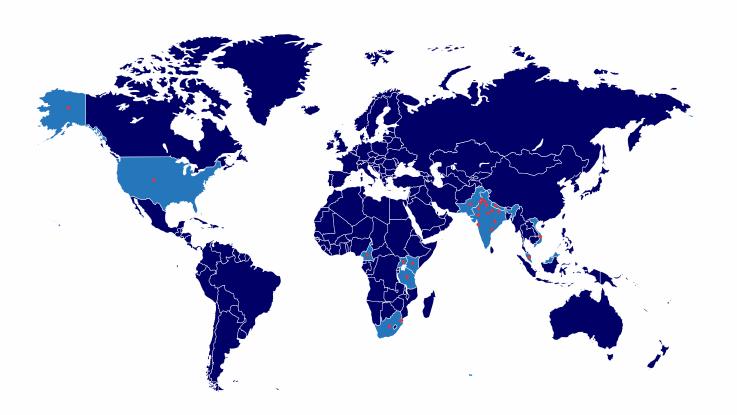
CUSTOMERS, the **EMPLOYEES** and the **SUPPLIERS**.

We endeavour to be the prime partner for our customers by-

- Providing them with optimal, cost-effective and timely solutions
- ♦ The best technical support
- ♦ After-sales service in the industry



Global Supplier of Edible Oil Refineries!





FLOW CHART FOR REFINING

TOTAL De-Gumming / Enzymatic De-Gumming

Degumming- Crude Oil is mixed with the acid solution to coagulate the particulate matters & phosphatides and removed with a centrifuge. During the process, phosphatides are converted to lecithin which has an affinity for water and gets dissolved into it.

Washing- Oil is washed with water to remove the remaining gum with a centrifuge. Neutralization is also done to get low color specs for soft oils like soya, sunflower and cottonseed.

Continuous Bleaching

The enzymatically treated oil is fed to the bleacher where a calculated amount of bleaching chemical (activated Bl. Earth & Carbon) is mixed with oil under vacuum and filtered with pressure leaf filters.

BATCH Dewaxing

Bleached oil is fed to the Dewaxing Crystallisers through heat exchangers. Oil is first cooled and kept for wax crystal maturation. Then finally, oil is filtered through plate & frame filters to remove wax (For RBO & Sunflower oils).

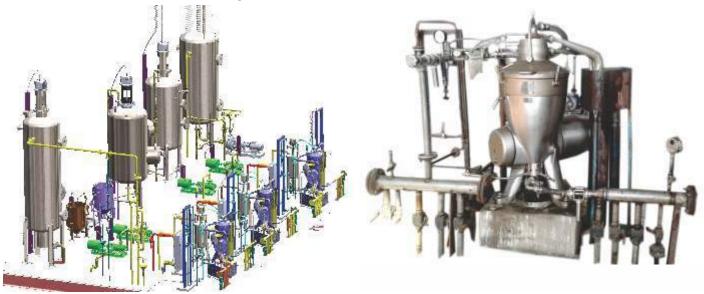
Continuous Deodorisation

Post-Bleached oil is fed to the deodorisation plant to remove the free fatty acid, odour and colour from the bleached oil under high vacuum.

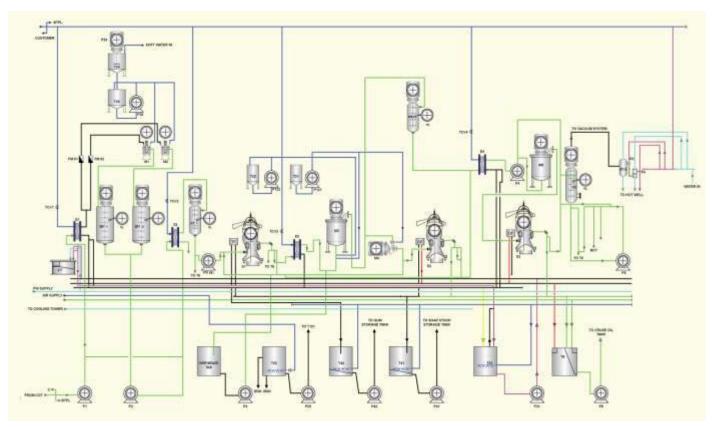


DEGUMMING / ENZYMATIC DEGUMMING

We supply degumming plants for soft oils based on short mix / long mix process. Oil is mixed with required quantities of phosphoric acid and water. Sufficient residue time is given so that hydratable gums get separated with the help of centrifuges. Degummed oil is then subjected to the neutralisation process and washing to get low color oils. For rice bran oil, a specially designed enzymatic process is developed to separate gums. Oil is mixed with a pre-calculated quantity of acid, enzymes and water. Long retention is given in a specially designed retention tank and hydrated gums are separated in a centrifuge, washed and sent for bleaching.



PFD FOR DEGUMMING / NEUT / WASHING





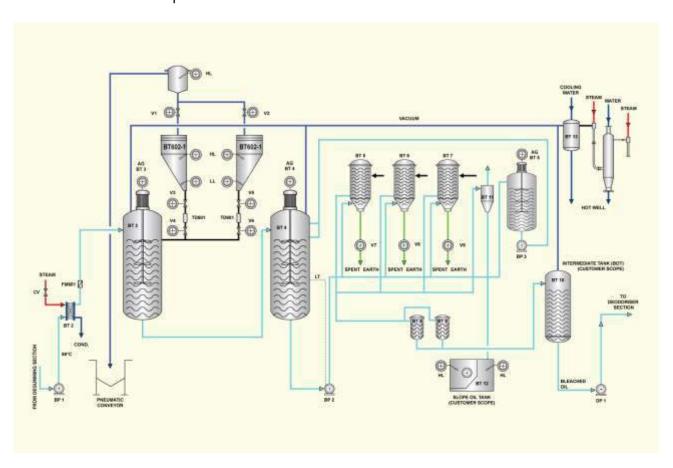
CONTINUOS BLEACHING SYSTEM

BRISSUN bleaching plants consist of highly efficient continuous bleachers that are specially designed for a high percentage of bleaching earth. Agitators are designed for optimum power and low steam consumption. A typical continuous bleaching plant is shown in the flow diagram. However, there can be some changes for different types of oils.



ADVANTAGES OF BRISSUN CONTINUOUS BLEACHING PLANT

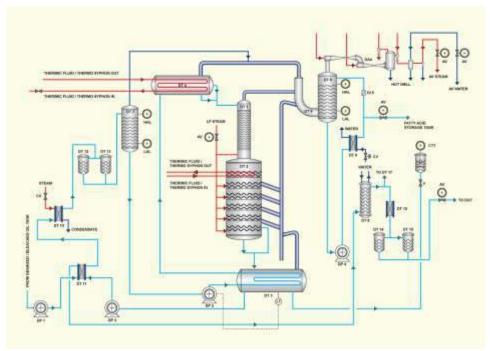
- Highly efficient agitator design for efficient mixing of the earth with oil and low energy consumption
- Specially designed bleacher trays to minimise carryover of bleaching earth to a cooling pond
- Specially designed PLF for low oil loss with efficient filtration
- Low steam consumption





CONTINUOUS PHYSICAL DEODORISER

We supply highly efficient and high-performance deodoriser which is configured to run on very low steam consumption. Steam required which comes in contact with oil droplets is very low. We use a highly efficient regenerative system so that once the system is in a continuous and stable state; it uses its own heat and steam; external requirements for heating oil are virtually nullified. Even thermic fluid or high-pressure steam requirements reduce. Our regenerative heater is designed to give you heat recovery of about 100 – 110 Deg C so that our precious energy is not wasted. Moreover, vacuum heaters are designed in straight tube design for ease in maintenance and avoid choking of tubes after 2–3 years of operation. A typical flow diagram with major equipment is shown in the process flow diagram.





DEODORISER CUM DEACIDIFIER

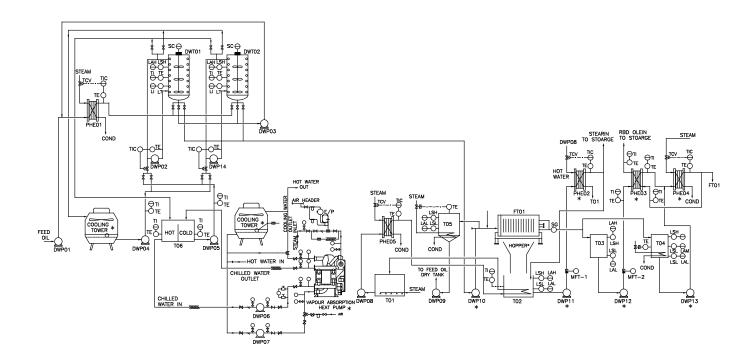
ADVANTAGES OF BRISSUN CONT PHYSICAL DEODORISER

- Highly efficient stripping of fatty acids at optimum temperature keeping tocopherol oryzanol and other micronutrients intact in oil
- Low consumption of Electricity, Steam and Water
- High concentration of fatty acid in fatty concentrate >95%
- Very low carryover fatty acid in a water pool
- High heat recovery through regeneration
- Color reduction by thermal bleaching during deodorisation
- VRHE designed with straight tubes. No need of frequent
- Low Temperature Fatty Distillation.



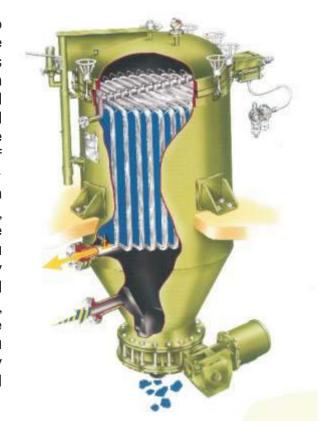
FRACTIONATION PLANTS

We supply Fractionation plants with full automation controls. Crystallisers are designed by our own design team to crystallise palm oil with optimum oil to cooling ratio. Critical cooling coils are formed at our own state of art facility for quality.



PRESSURE LEAF FILTER

We supply pressure leaf filters in sizes from 5m² to 75m². The material of construction for PLF can be carbon steel, \$\$304 or as per customer's requirements. Leaves are five-layer construction with filtration membrane in SS316L. PLF is equipped with a highly efficient pneumatically operated vibrator for easy removal of spent earth from the bottom by a pneumatically actuated valve. Leaf riveting is done by automated machines for leakproof leaves. Our pressure leaf filter is used in various applications such as oil, chemical filtration, pharmaceuticals alumina and food. Our pressure leaf filters have advantages such as low oil loss, a low-pressure drop across elements, specially designed frames for high-efficiency and sturdiness.as oil, chemical filtration, pharmaceuticals alumina and food. Our pressure leaf filters have advantages such as low oil loss, a low-pressure drop across elements, specially designed frames for high-efficiency and sturdiness.





LECITHIN PLANTS

We supply lecithin plants for soya lecithin as well as Rice bran lyso-lecithin. plants ranges from 10 tpd to 30 tpd, 10 tpd plants can be modular like shown in picture.

We have also developed latest technology for lecithin drying by evaporation with less steam consumption and very less energy consumption.



POLISH FILTERS

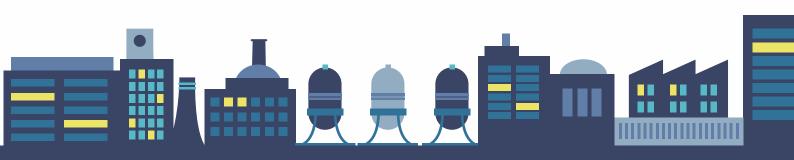
We manufacture stainless steel Candletype polish filters for all types of fine filtration. These filters have unique advantages.

- High area filtration for given sizes
- No tearing of filter cloth due to excellent design
- Low pressure drop
- Ease of cleaning and removal of candles
- No chances of particles passing through screens

SELF CLEANING CANDLE FILTERS

We design and manufacture self cleaning Candle filters for various special applications. These filters are available in various sizes for different applications, which auto cleans itself with complete applications.

- No need of frequent cleaning of filters
- Auto cleaning filters
- Auto discharge of Filtrate Cakes





MODULAR PLANTS

We design, manufacture and supply modular refinery up to 50 tpd in skid-mounted modules of 20 ft and 40 ft height to fit in the regular size of containers for export. These skid-mounted modules are supplied in CKD complete with piping, insulation, instrumentation and extra cabling. Buyer needs to assemble on site at a pre-designed civil foundation. Machines are ready to use after assembly.



PROJECT ENGINEERING

BRISSUN, has an experienced team of Engineers for Installation and Commissioning. Each and every aspect of planning at site and off the site is taken care of . Plant Layout and Piping Layout is detailed with the aid of 3D drawings.

Giving complete view of Equipment Installation and piping along with detailed BOM. We have experience of 18 years for Errection and Commissioning of Edible Oil Refining Plants.





INFRASTRUCTURE

We have a designated team of engineers who design all the equipment as per ASME codes and provide detailed drawings for structure, equipment layout and piping layouts. Instrumentation mounting & cabling layouts added. We have our own modern manufacturing unit located at Pune, in Talegaon MIDC area. The manufacturing facility is spread in an area of 60000 Ft², of which 20000 Ft² is covered shed equipped with modern fabrication equipment. We have a facility for manufacturing all types of pressure vessels designed as per ASME section VIII & IX. The plant is run with the help of skilled manpower that has an experience of about 10 - 15 years.









(ISO 9001-2015 Certified Company)



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